STATE OF MARYLAND

DHMH

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September 7, 2012

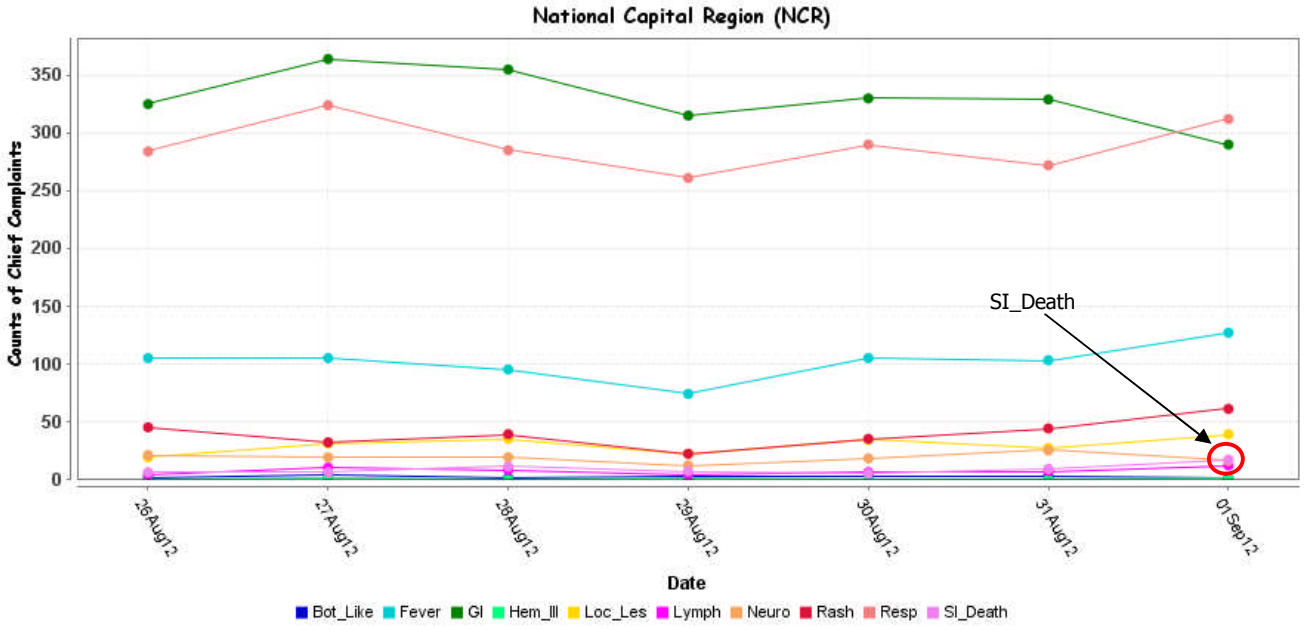
Public Health & Emergency Preparedness Bulletin: # 2012:35
Reporting for the week ending 09/01/12 (MMWR Week #35)

CURRENT HOMELAND SECURITY THREAT LEVELS

National: **No Active Alerts**
Maryland: **Level One (MEMA status)**

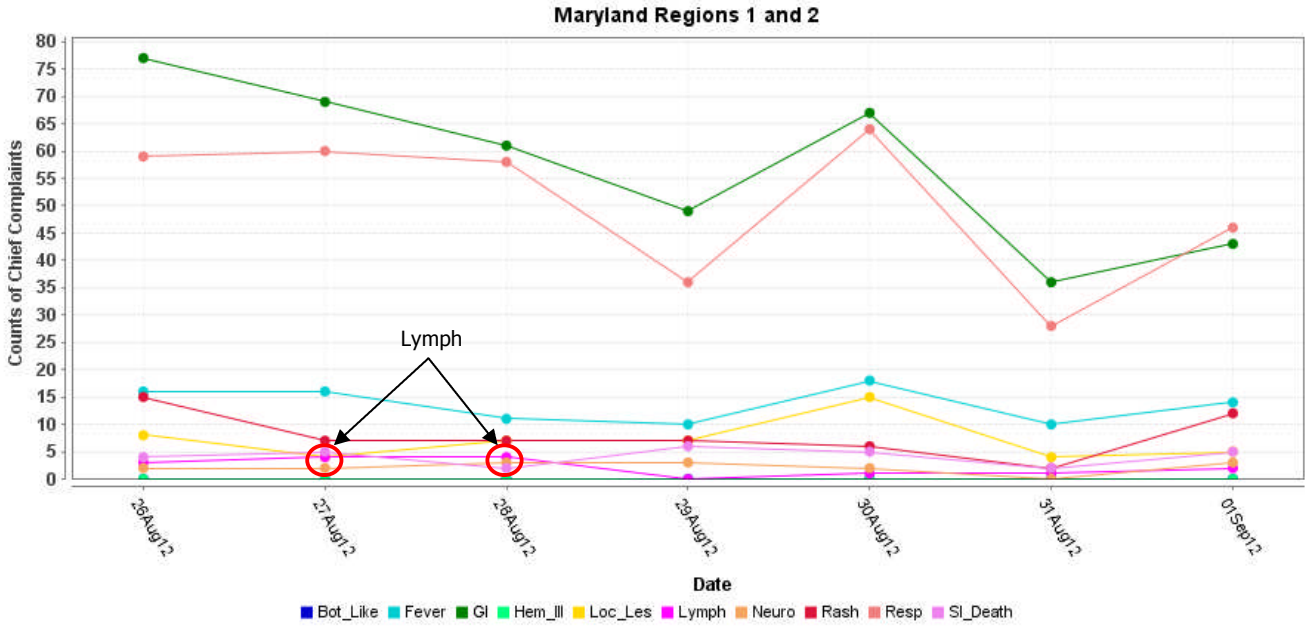
SYNDROMIC SURVEILLANCE REPORTS
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

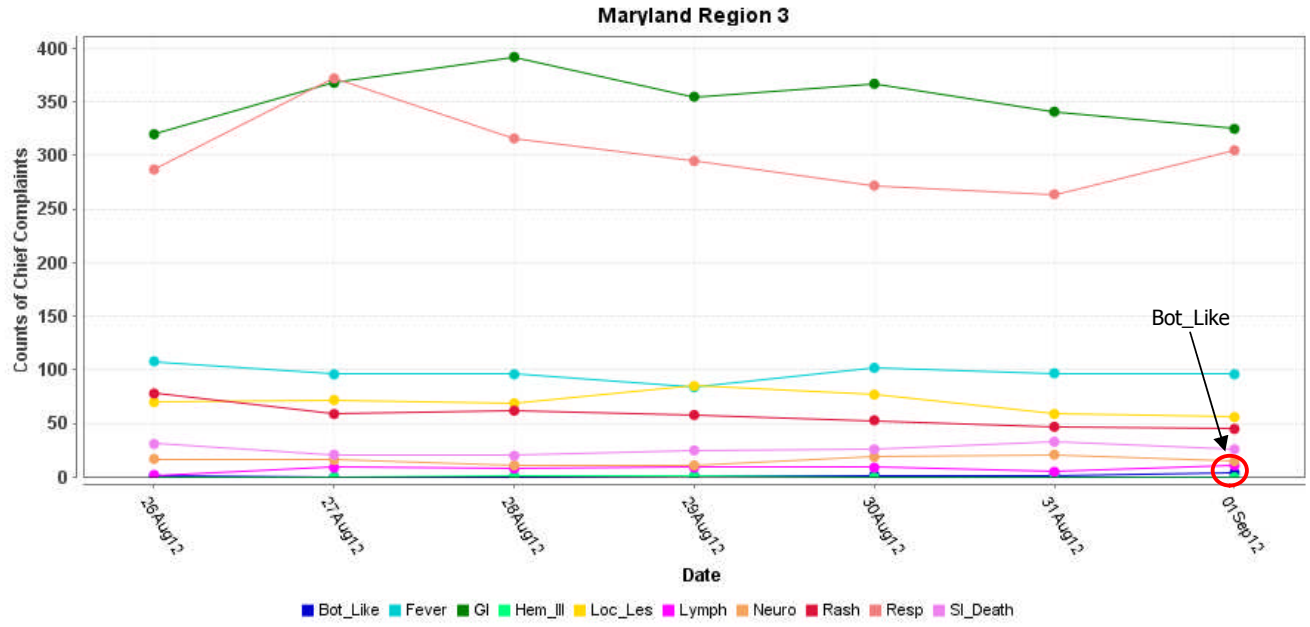


*Includes EDs in all jurisdictions in the NCR (MD, VA, and DC) reporting to ESSENCE

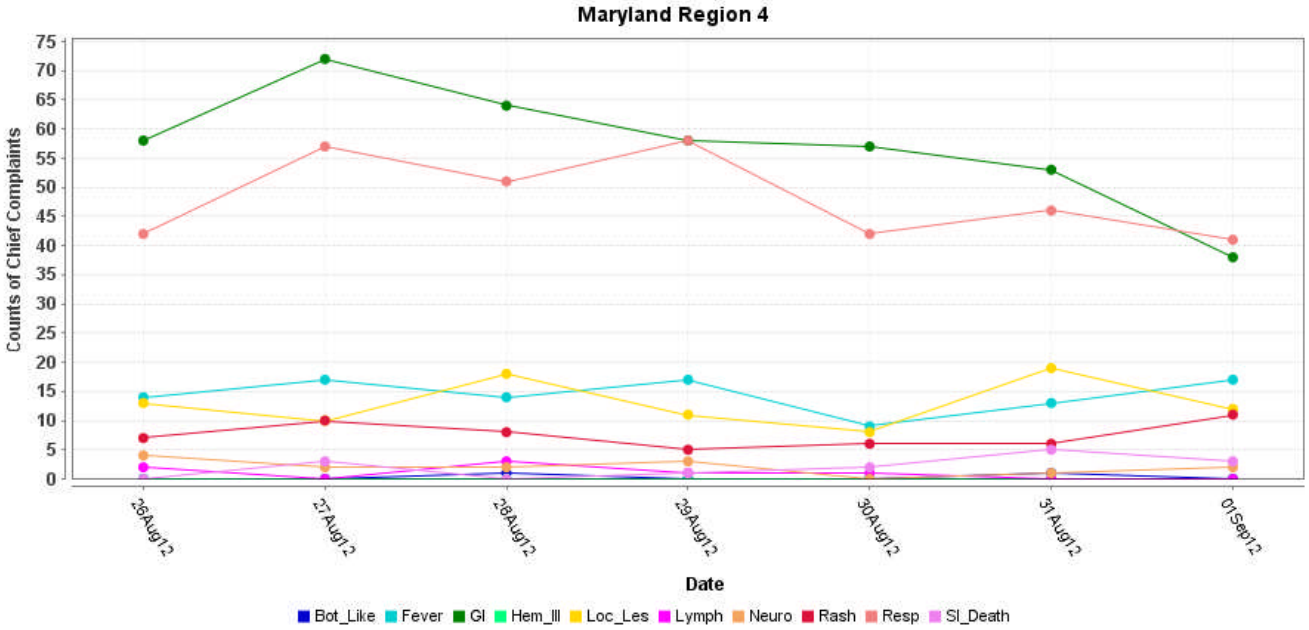
MARYLAND ESSENCE:



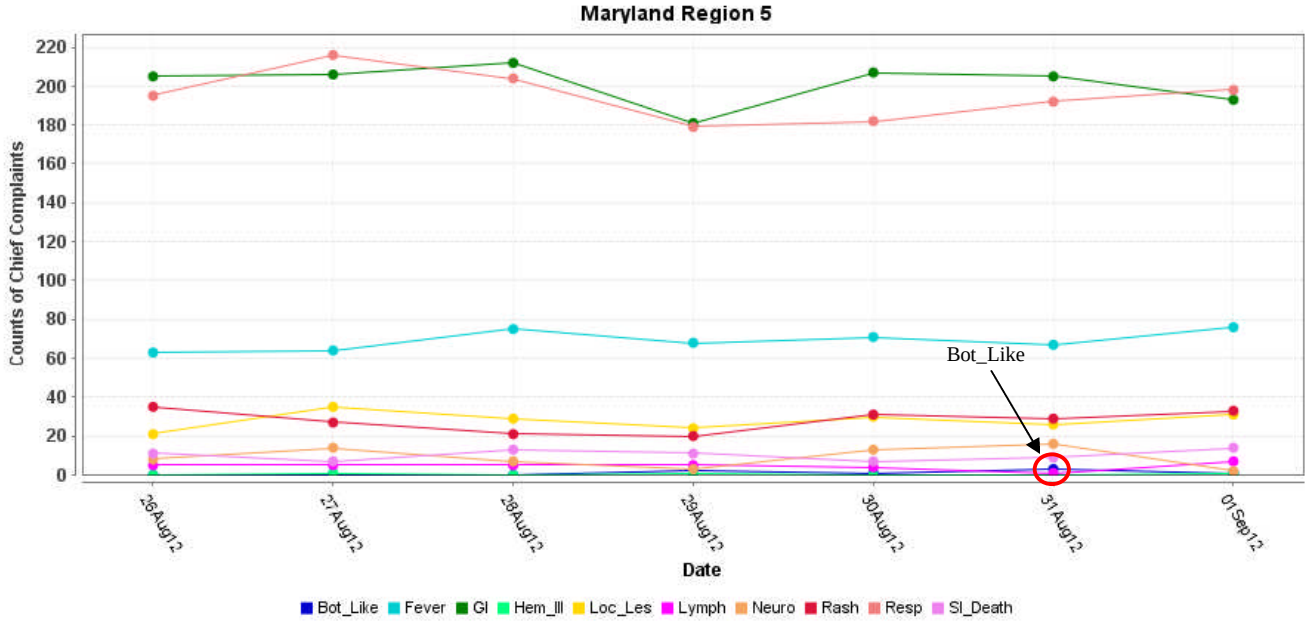
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



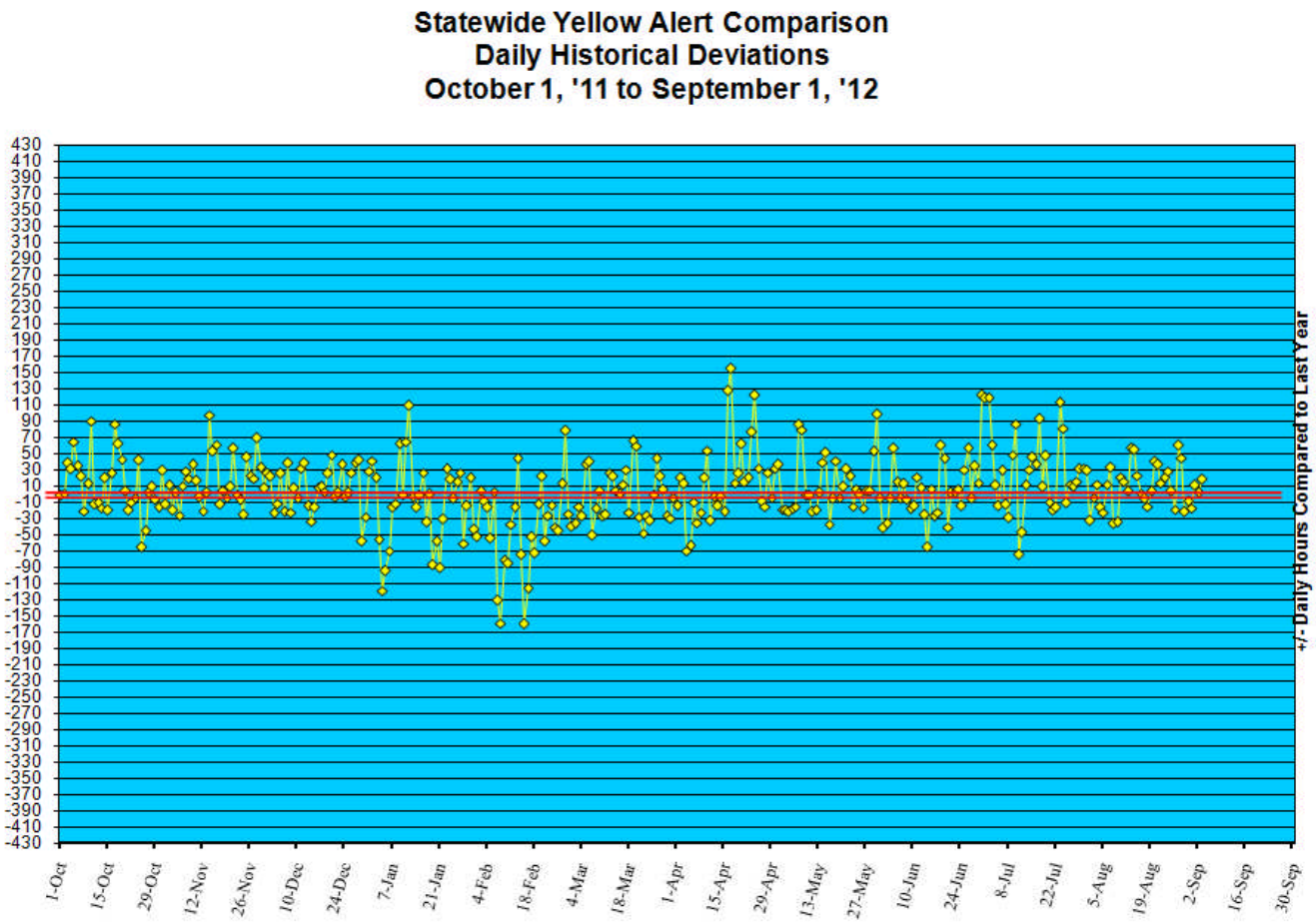
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/11.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in June 2012 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (August 26 – September 1, 2012):	12	0
Prior week (August 19 – August 25, 2012):	22	0
Week#35, 2011 (August 28 – September 3, 2011):	16	0

1 outbreak was reported to DHMH during MMWR Week 35 (August 26-September 1, 2012)

1 Respiratory illness outbreak
1 outbreak of PNEUMONIA in a Nursing Home

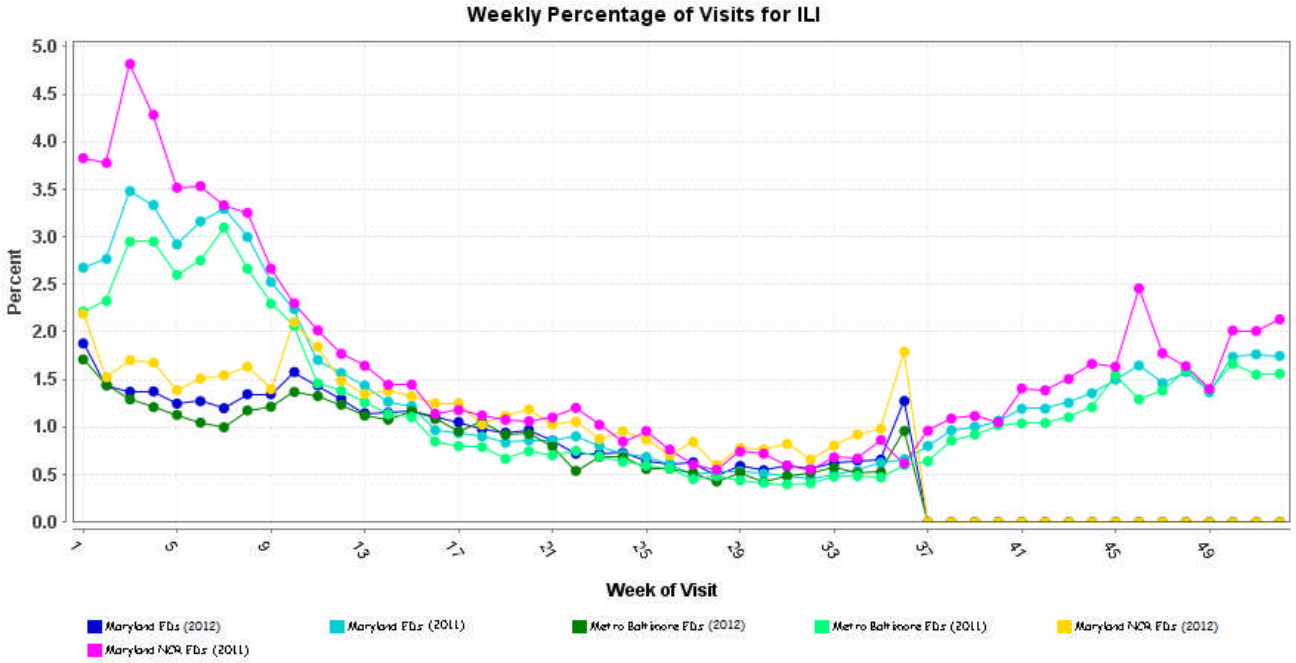
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May.

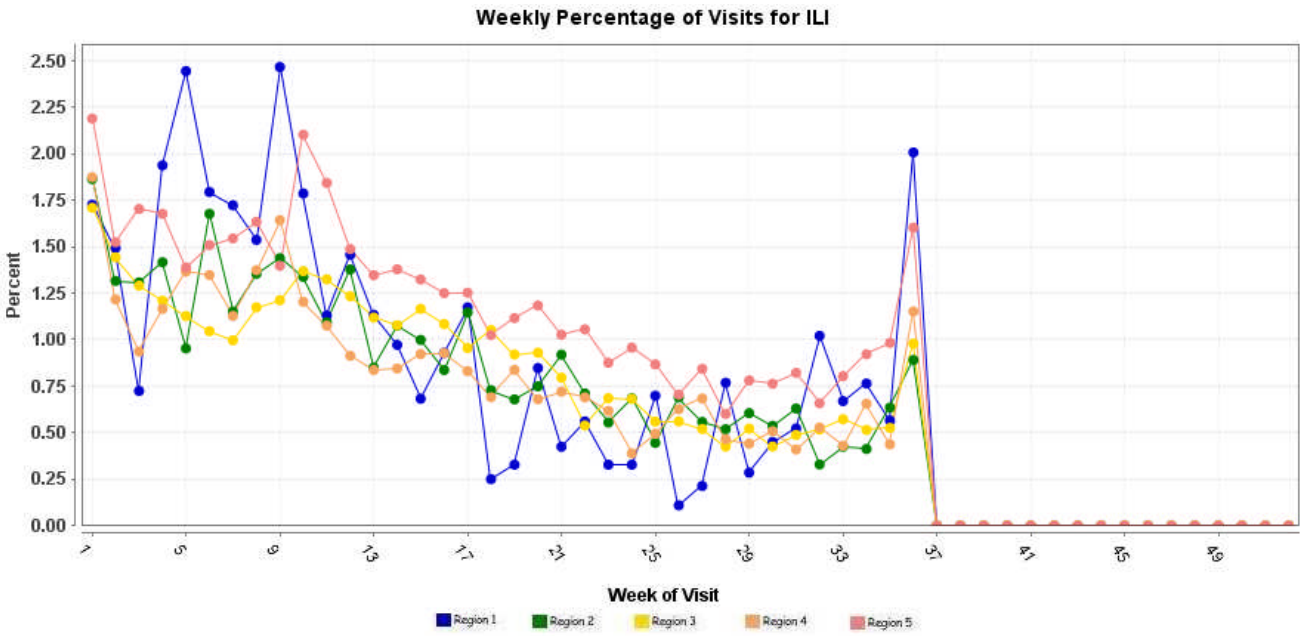
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



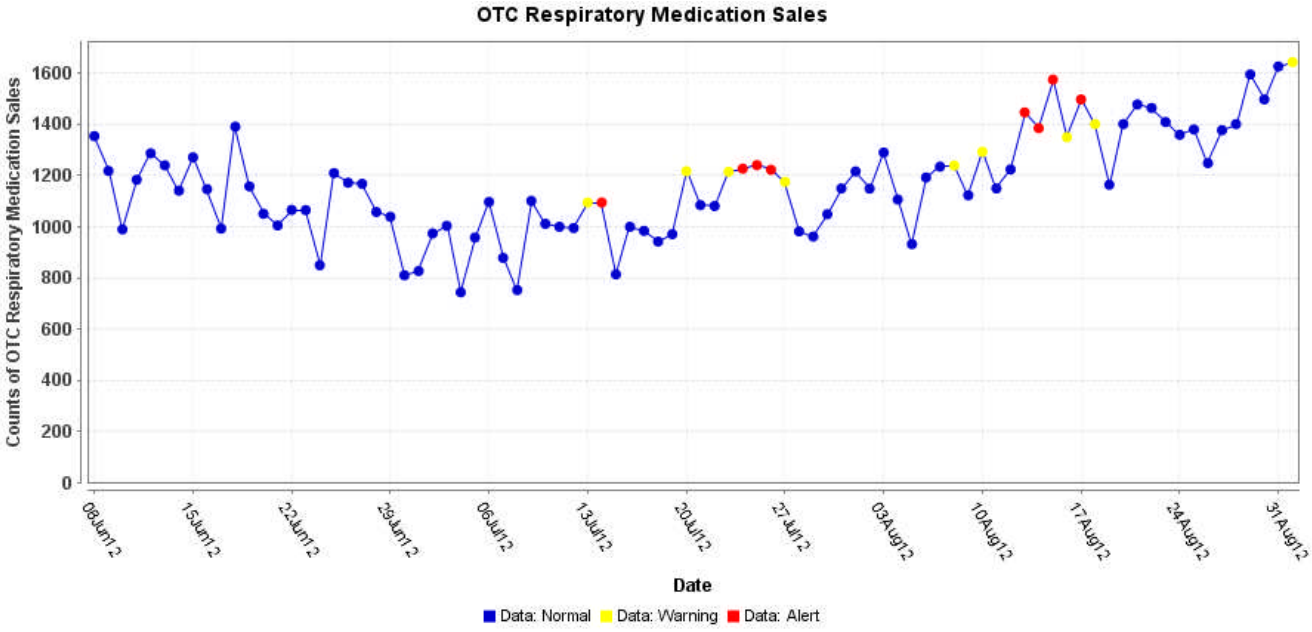
* Includes 2011 and 2012 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total



*Includes 2012 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is 3. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

In **Phase 3**, an animal or human-animal influenza reassortant virus has caused sporadic cases or small clusters of disease in people, but has not resulted in human-to-human transmission sufficient to sustain community-level outbreaks. Limited human-to-human transmission may occur under some circumstances, for example, when there is close contact between an infected person and an unprotected caregiver. However, limited transmission under such restricted circumstances does not indicate that the virus has gained the level of transmissibility among humans necessary to cause a pandemic.

As of August 10, 2012, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 608, of which 359 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

AVIAN INFLUENZA (INDONESIA): 10 July 2012, The Ministry of Health of Indonesia has notified the WHO of a new case of human infection with avian influenza A (H5N1) virus. The case is a 37-year-old male from Yogyakarta province. He developed fever on 24 Jul 2012, was hospitalized on 27 Jul 2012 and died on Mon 30 Jul 2012. Epidemiological investigation on the case found that the case had 4 pet caged birds in his home, which is about 50 metres [54.6 yards] from a poultry slaughter house and near a farm. Infection with avian influenza A(H5N1) virus was confirmed by the National Institute of Health Research and Development (NIHRD), Ministry of Health and reported to WHO by the National IHR Focal Point. To date, the total number of human influenza A(H5N1) cases in Indonesia is 191 with 159 fatalities, 8 (all fatal) of which occurred in 2012.

NATIONAL DISEASE REPORTS*

PLAGUE (COLORADO): 28 August 2012, A 7-year-old girl, a resident of Archuleta County, CO, presented to a small community emergency room (ER) with a fever of 107 F and seizures on the evening of 24 Aug 2012. She was transported to a pediatric ICU in Denver, where she deteriorated into severe septic shock. Further history revealed that she was playing with a dead skunk near her home some days before the onset of fever, and that she received multiple flea bites from fleas on the skunk carcass. Blood cultures have confirmed *Yersinia pestis* and clinically she has septicemic plague. She remains in critical condition. (Plague is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (TEXAS): 29 August 2012, Officials are investigating an outbreak of food poisoning that sickened about 70 Bexar County Jail inmates this week. "I think, for the greater part of it, we're past it," said Deputy Chief Mark Thomas, the jail's administrator. "We're trying to trace it back to what may have been the cause, and we're continuing to monitor these inmates." Thomas said prisoners began to show symptoms of food poisoning Mon 27 Aug 2012, and ill inmates were taken to the jail's infirmary, where they were treated by University Hospital staff housed at the jail. By today, 29 Aug 2012, most of the sick inmates had improved, Thomas said. On the advice of UH staff, the infected inmates were being given Gatorade [a carbohydrate-electrolyte sports drink]. "We don't usually give them Gatorade, but we're trying to keep them hydrated," he said. The Metropolitan Health Department is investigating what caused the outbreak, said spokeswoman Carole Schliesinger. "It's a localized situation at the jail," she said. "It's contained, and it's not spreading in any way." About 3500 inmates are housed at the jail, Thomas said. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

SALMONELLOSIS (USA): 30 August 2012, A total of 204 persons infected with the outbreak strain of _Salmonella [enterica_ serotype] Typhimurium have been reported from 22 states. The number of ill persons identified in each state is as follows: Alabama (13), Arkansas (5), California (2), Florida (1), Georgia (4), Illinois (24), Indiana (22), Iowa (8), Kentucky (63), Massachusetts (2), Michigan (6), Minnesota (5), Mississippi (5), Missouri (13), New Jersey (2), North Carolina (5), Ohio (5), Pennsylvania (2), South Carolina (3), Tennessee (8), Texas (2), and Wisconsin (4). 78 ill persons have been hospitalized. 2 deaths have been reported in Kentucky. Collaborative investigation efforts of state, local, and federal public health and regulatory agencies indicate that cantaloupe originating from Chamberlain Farms Produce, Inc. of Owensville, Indiana is a source of this outbreak. On 22 Aug 2012, the FDA announced a recall of cantaloupes originating from Chamberlain Farms Produce, Inc. Records available currently indicate that this product was initially shipped to Indiana, Kentucky, Missouri, Tennessee, Ohio, Illinois, and Wisconsin, although further shipment was likely. Consumers who recently purchased Chamberlain Farms cantaloupes are advised not to eat them and discard any remaining cantaloupe. Based on the available information, consumers can continue to purchase and eat cantaloupes that do not originate from Chamberlain Farms Produce, Inc. Many cantaloupes have the growing area identified with a sticker on the fruit. If no sticker is present, consumers should inquire about the source. When in doubt, throw it out. Retailers and food service operators should not sell or serve Chamberlain Farms cantaloupes. FDA is continuing to work closely with CDC and state partners during this ongoing investigation. CDC will update the public on the progress of this investigation as information becomes available. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (ILLINOIS): 31 August 2012, A third visitor to a downtown hotel earlier this summer has died after contracting Legionnaires' disease, city officials announced Friday. Media in Ireland are reporting that the man was a retired plumber who was in Chicago to celebrate his 40th wedding anniversary when he apparently contracted the disease. Newly released test results indicate the primary source of the Legionnaires' outbreak at the JW Marriott at 151 W. Adams St. was a decorative fountain in the hotel's main lobby. The Irish Examiner reported that Thomas Keane, 66, shared a meal with his wife at the JW Marriott during their July trip to Chicago. The father of three from Limerick and his wife were marking their anniversary by visiting another son who lives in the Chicago area, the Examiner reported. In addition to the third death, the Chicago Department of Health reported two more cases of Legionnaires' disease linked to the hotel, bringing the total to 10. Those testing positive for the disease visited or stayed at the JW Marriott between July 16 and Aug. 15. Hotel officials have removed the decorative fountain that test results showed was the primary cause of infection. Tests also showed that the pool, the spa's whirlpool and both the men's and women's locker rooms contained "the same species of *Legionella* as were found in the ill patients." Those areas "have either been disabled or made inaccessible to the public," the health department said. Showerheads in guest rooms tested negative for the bacteria. Legionnaires' disease, a severe form of pneumonia, comes from *Legionella* bacteria, which can thrive in warm water. Parts of the spa were closed and the fountain, whirlpool and pool were first drained after three cases of the disease were reported among hotel guests last week. Health officials do not believe there is an ongoing risk of infection at the Marriott. They said the hotel, which remains open, is cooperating with the investigation. Keane, who died Wednesday, is the first person to contract the disease to be publicly identified. After returning to Ireland in late July, the

Examiner reports, Keane became ill and was diagnosed with Legionnaires' disease. The Examiner is a national daily newspaper based in Cork. An email sent to Richard Keane wasn't returned Friday. A spokesman with Health Service Executive, Ireland's national health care provider, said he couldn't comment on specific cases because of confidentiality concerns. Chicago's public health department declined to confirm if Keane was one of the outbreak's victims. Local officials have not provided information on the identities of the victims, beyond saying that one person who contracted the disease and survived is from Illinois, and that the eight victims confirmed earlier in the week ranged in age from 49 to 82. CBS-TV Chicago reported earlier this week that a physician from Florida died after being infected. That report could not be confirmed. Health officials in Virginia and Minnesota each told the Tribune they had tied one non-fatal case of Legionnaires' to Chicago. A spokesman for the Minnesota Department of Health said his state has also confirmed one case of Pontiac fever, a less severe infection caused by the same bacteria, in a person who visited the Marriott. "Many other" Minnesotans who stayed at the hotel have symptoms consistent with Pontiac fever, the spokesman said. Between 8,000 and 18,000 people are infected with Legionnaires' every year in the U.S., according to the federal Centers for Disease Control and Prevention, and between 5 and 30 percent of those who get sick later die. Most people exposed to *Legionella* do not become ill. The disease cannot be transmitted from person to person. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS*

E. COLI (JAPAN): 29 August 2012, At least 5 people were confirmed to have died in a mass outbreak of *E. coli* O157 food poisoning in Hokkaido as of Mon 20 Aug 2012, with 110 others likely suffering from contaminated Chinese cabbage pickles. In addition to the 5 confirmed fatalities, 2 elderly women who were residents at a nursing home in Ebetsu, which is near Sapporo, have died after developing symptoms of food poisoning. However, O157 bacteria has yet to be confirmed as the cause of their deaths. At least 3 other residents at the same facility have been hospitalized with serious symptoms. It is strongly believed that the source of the *E. coli* O157 outbreak was lightly pickled Chinese cabbage. The Sapporo-based food company that processed the cabbage is suspected of failing to properly sterilize the cabbage by heating. Many details regarding how the outbreak reached epidemic proportions have yet to be clarified. One possible factor behind the mass food poisoning is a method of using less salt when pickling vegetables to suit consumer tastes. One of the 4 fatalities in the area under the jurisdiction of the Sapporo Health Center was a 4-year-old girl who died 11 Aug 2012. Lightly pickled Chinese cabbage was a favorite food among the girl's family and was served on the dining table almost every day, her grandfather, said. "We never thought pickled vegetables could cause food poisoning and feel extremely sorry that she lost her life when the rest of our family [who also ate the same pickled cabbage] did not fall ill," he said. The pickled Chinese cabbage in question was produced by the food company Iwai Shokuhin in Sapporo. The company shipped about 270 kilograms of pickled Chinese cabbage on 29 and 30 Jul 2012. From 11 to 19 Aug 2012, cases or suspected cases of O157 poisoning were reported at 9 out of 10 nursing care facilities in and around Sapporo that served the pickles. Many of the fatalities were people aged 80 or older, health officials said. Mass poisoning caused by lightly pickled vegetables occurred in Saitama Prefecture in 2000, resulting in a single death, and in 2005 in Kagawa Prefecture, which resulted in 5 deaths. All fatalities were elderly residents of nursing care facilities. In 2002, more than 100 boys and girls at a nursery in Fukuoka were infected with *E. coli O157*. The incident was traced back to lightly pickled cucumbers. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

LEGIONELLOSIS (CANADA): 29 August 2012, The death toll from the outbreak of Legionnaires' disease increased by one to a total of 9 in Quebec City on Wednesday [29 Aug 2012], as public-health authorities sought additional help in their inspection of buildings that are suspected of harboring the deadly *Legionella* bacteria. Authorities also reported that the number of people infected with the non-contagious bacterial illness surged to 141 from 126 on Tuesday [28 Aug 2012] in what is one of the biggest outbreaks of Legionnaires' disease in Canada in at least 25 years. The outbreak is now in its 6th week, with no signs of having peaked. Dr Francois Desbiens, director of public health in the provincial capital, said that the team of municipal and public-health inspectors will now receive help from the 'Regie du batiment' [building control], in charge of the province's buildings. On Tuesday [28 Aug 2012], Desbiens said that visual inspections of 99 rooftop cooling towers the suspected source of the outbreak revealed that at least 29 were in filthy condition. Authorities were getting ready to douse those towers with another shock treatment of bromine to kill off any lingering bacteria. Those towers were first disinfected last week [week of 20 Aug 2012]. Given that the incubation period for Legionnaires' disease is 2 to 10 days, it's possible that some people might have inhaled the contaminated air from some of those cooling towers before the 1st shock treatment, and might still fall ill in the coming days. Meanwhile, authorities have greatly expanded the contamination zone since the outbreak was officially declared in mid-July [2012]. The initial zone of contamination was in the very centre of the capital, with a radius of less than 1 kilometer [0.62 mi]. The contamination zone has now expanded in concentric circles in every direction, but mostly to the north, with a radius of more than 6 kilometers [3.7 mi]. Among the buildings under investigation are federal and provincial government office towers, hotels, and commercial properties. *Legionella pneumophila* bacteria are known to thrive in temperatures between 25 deg C and 42 deg C [77 -107.6 deg F], usually in the summer and fall. Cooling towers that are not disinfected regularly are known to breed the bacteria, which are inadvertently pumped through ventilation systems and vented outside as mist. People walking by these vents can inhale the aerosolized bacteria and fall ill in a matter of days. Once the bacteria enter the lungs, a persistent cough takes hold, along with chest pains, a high fever, and chills. On Thursday [30 Aug 2012], authorities are expected to order those building owners who have not completed a thorough cleaning of their ventilation systems to shut off their cooling towers. (Water Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect case

**National and International Disease Reports are retrieved from http://www.promedmail.org/.*

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://preparedness.dhmh.maryland.gov/

Maryland's Resident Influenza Tracking System: http://dhmh.maryland.gov/flusurvey

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of

outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media) SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE *acute exacerbation* of chronic illnesses.)	Anthrax (inhalational) Tularemia Plague (pneumonic)
Neurological	ACUTE neurological infection of the central nervous system (CNS) SPECIFIC diagnosis of acute CNS infection such as pneumoccocal meningitis, viral encephailitis ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephailitis NOS, encephalopathy NOS ACUTE non-specific symptoms of CNS infection such as meningismus, delerium EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's	Not applicable
Rash	ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs) SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheaic dermatitis, rosacea EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema	Smallpox
Specific Infection	ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal) INCLUDES septicemia from known bacteria INCLUDES other febrile illnesses such as scarlet fever	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Fever	ACUTE potentially febrile illness of origin not specified INCLUDES fever and septicemia not otherwise specified INCLUDES unspecified viral illness even though unknown if fever is present EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome	Not applicable
Severe Illness or Death potentially due to infectious disease	ACUTE onset of shock or coma from potentially infectious causes EXCLUDES shock from trauma INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths	Not applicable